CLAIMS:

1.   A method for storing a plurality of still images to form a panoramic image, the method comprising the steps of:

5   receiving a first image forming a part of a series of images to form a panoramic image;

storing the first image in memory;

receiving one or more subsequent images and for each of the images received performing the sub-steps of

10   calculating one or more panoramic parameters between a current image and a previous image stored in memory; and

storing the current image with the one or more panoramic parameters in memory.

15   2.   The method of claim 1, wherein the step of storing the current image with the one or more panoramic parameters includes storing the panoramic parameters in a field of a compress images format reserved for comments or extensions so as to preserve the stored image file compatibility with other images stored without the panoramic parameters.

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3.   The method of claim 2, wherein the step of storing the current image with one or more panoramic parameters includes storing the current image in an image format selected from the group of image formats consisting of JPEG, BMP, and TIFF.

25   4.   The method of claim 4, wherein the step storing the current image with one or more panoramic parameters includes storing the current image in non-volatile memory.

5.   The method of claim 2, wherein the step of storing the current image with one or more panoramic parameters includes storing the panoramic parameters in a comment

30   field of an image format.

6.　　The method of claim 2, wherein the step of storing the current image with one or more panoramic parameters includes storing the panoramic parameters in a marker segment of a JPEG image format.

5　7.　　The method of claim 1, wherein the step of storing the current image with one or more panoramic parameters includes storing an index value representing a sequence number of the current image in the series of images.

8.　　The method of claim 1, wherein the step of storing the current image with one or more

10　more panoramic parameters includes storing any one of the parameters of motion estimation, displacement, color, and focal length.

9.　　The method of claim 1, further comprising the steps of:

playing back the plurality of still images stored to form a panoramic image

15　comprising the sub-steps of:

retrieving one or more images from memory; and

stitching the one or more images together to form a panoramic image

using the one or more panoramic parameters previously stored in memory.

20　10.　　The method of claims 9, where in the step of playing back the plurality of still images includes the sub-steps of:

decoding the one or more images from a given image format; and

down sampling the one or more images to fit a given display format.

11. A computer readable storage medium containing programming instructions for storing a plurality of still images to form a panoramic image from a digital camera, the programming instructions comprising:

receiving a first image forming a part of a series of images to form a panoramic

5 image;

storing the first image in memory;

receiving one or more subsequent images and for each of the images received performing the programming instructions of

calculating one or more panoramic parameters between a current image

10 and a previous image stored in memory; and

storing the current image with the one or more panoramic parameters in memory.

12. The computer readable storage medium of claim 11, wherein the programming

15 instruction of storing the current image with the one or more panoramic parameters includes storing the panoramic parameters in a field of a compress images format reserved for comments or extensions so as to preserve the stored image file compatibility with other images stored without the panoramic parameters.

20 13. The computer readable storage medium of claim 12, wherein the programming instruction of storing the current image with one or more panoramic parameters includes storing the current image in an image format selected from the group of image formats consisting of JPEG, BMP, and TIFF.

14.   A picture-stitching device for storing a plurality of still images to form a panoramic image, the device comprising:

an interface to memory for holding a plurality of still images to form a panoramic;

a first image received in memory which forms a part of a series of images to

5   form a panoramic image;

one or more subsequent images received in a buffer;

an interface to a processor for calculating one or more panoramic parameters and for each one or more subsequent images received into memory, calculating one or more panoramic parameters between a current image and a previous image stored in

10   memory; and

wherein the current image with the one or more panoramic parameters are stored in memory.

15.   The device of claim 14, wherein the one or more panoramic parameters are

15   stored with the current image in a field of a compress images format reserved for comments or extensions so as to preserve the stored image file compatibility with other images stored without the panoramic parameters.

16.   The device of claim 15, wherein the more panoramic parameters includes

20   storing the current image in an image format selected from the group of image formats consisting of JPEG, BMP, and TIFF.

17.   The device of claim 14, wherein the interface to memory includes an interface to non-volatile memory.

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18.   The device of claim 15, wherein the one or more panoramic parameters are stored in a comment field of an image format.

19.   The device of claim 15, wherein the one or more panoramic parameters are

30   stored in a marker segment of a JPEG image format.

20.   The device of method of claim 14, wherein the one or more panoramic parameters are stored with an index value representing a sequence number of the current image in the series of images.

5   21.   The device of claim 14, wherein the one or more panoramic parameters includes any one of the parameters of motion estimation, displacement, color, and focal length.